

**ABSTRACT OF THE DISCLOSURE**

A mixing valve assembly 42 is communicated with a dedicated tank 51D, storing therein a compatibilizer D, via an inlet valve 43 and is also communicated with dedicated tanks 51A-51C via three injection valves, the tanks storing therein auxiliaries A-C respectively. A chemical formulation is prepared by selectively injecting any one(s) of four chemical agents into the mixing valve assembly 42 by way of on-off control of the inlet valve 43 and the injection valves and blending together the injected chemical agents. Then, the chemical formulation is pumped into SCF by a high-pressure pump 45 such that the SCF and the chemical formulation are mixed together to form a process fluid. Thus, the number of components of a high-pressure portion can be reduced to achieve a cost reduction of an apparatus. Furthermore, a pipe line for pumping the chemical agents is simplified.

(Fig.2)